

New and noteworthy North American plants.

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1. *RANUNCULUS LAPPONICUS* L.—The range of this arctic species is usually stated as “Lat. 50° and northward.” Professor Macoun extends its range somewhat southward, in recording it from Prince Arthur’s Landing, Thunder Bay. We now have it from the Lake Superior region of Minnesota, where it was collected by Mr. L. S. Cheney, of the University of Wisconsin, twenty miles northeast of Grand Marais. Mr. Cheney’s specimens were collected in the same region as the imperfectly known *Anemone nudicaulis* Gray, which Dr. N. L. Britton has shown to be *Ranunculus Laponicus*.

2. *Petalostemon glandulosus*, n. sp.—Glabrous and glandular throughout: stems herbaceous, striate, leafy, 2 to 6^{dm} high, from a somewhat woody base: leaves 2 to 4^{cm} long; leaflets six to twelve pairs, oblong or oblong-obovate, 5 to 6^{mm} long, obtuse or retuse, conspicuously black dotted beneath: spikes cylindrical, very dense, 4 to 9^{cm} long, on usually slender peduncles (5 to 8^{cm} long): bracts very narrow, long acuminate, much longer than the calyx: calyx rose-tinged, tipped with green, conspicuously glandular, 3 to 4^{mm} long, deeply lobed, with the very minute greenish teeth pubescent on the margins: petals white, linear, almost three times as long as the calyx; the vexillum broadly cordate: pod pubescent above.—Eastern Texas, at Hockley (*F. W. Thurow*, in 1890), and at Industry (*H. Wurzlow*, in 1892). Apparently nearest *P. candidus* Michx., in fact has probably been distributed as that species; but differs in being strongly punctate throughout, in the more numerous and short-oblong leaflets usually acutish spike, early deciduous bracts, and the prominently glandular strongly oblique calyx with much shorter teeth.

3. *Astragalus strigosus*, n. sp. — Whole plant grayish with coarse appressed pubescence, erect, 17 to 25^{cm} high, leafy, with many very slender stems from a somewhat woody base: stipules triangular, acuminate; leaves 7 to 11^{cm} long, with thirteen to twenty-one sessile acute narrow linear to almost filiform leaflets (1 to 2^{cm} long): peduncles much shorter than the leaves, together with the elongated raceme (with ten to sixteen distant flowers) 10 to 15^{cm} long: flowers purplish, 1^{cm} long: calyx very strigose, the

subulate linear teeth about equalling the tube: pod linear, 18 to 20^{cm} long, about 3.5^{mm} broad, sessile. — Basin, Montana, July, 1892, *F. D. Kelsey*. One of the SCYTOCARPI, and nearest *A. flexuosus* Dougl., but distinguished by its many slender stems and leaves, linear and acute sessile leaflets, shorter peduncles with more elongated racemes, calyx with longer and linear teeth, wings with a short broad and acute appendage, and sessile pod.

4. **Astragalus atropubescens**, n. sp. — Stems and leaves grayish with appressed pubescence, becoming black hairy in the inflorescence and especially on the calyx: stems erect, 3.5 to 5^{dm} high, with very many slender stems from a woody base: stipules lanceolate, acute; leaves few, 13 to 20^{cm} long; leaflets twenty-one to thirty-three, linear-oblong, glabrate above, 15^{mm} long, cuspidate, very blunt (seldom retuse), short-petioled, usually with a cuneate base: peduncles much shorter than the leaves, together with the scarcely elongated (eleven to sixteen-flowered) raceme 12 to 20^{cm} long: flowers declined, ochroleucous, 1.5^{cm} long: calyx oblique, very black with appressed hairs, 5 to 6^{mm} long, the subulate teeth half as long as the tube: vexillum and wings much longer than the keel: pod linear-oblong, coriaceous, erect, stipitate (stipe 5^{mm} long), glabrous, straight, 2^{cm} long without the stipe, 5^{mm} broad, acute at base, acuminate at apex, deeply grooved on the back but not completely two-celled, the ventral suture scarcely acute. — Deer Lodge, Montana, June, 1892, *F. D. Kelsey*. The species seems to belong with the GALEGIFORMES but it has an erect pod and is not so leafy. In addition to the characters just mentioned it differs from *A. Drummondii* Dougl. in its appressed pubescence, much more black hairy calyx, and shorter linear-oblong pod; and from *A. scopulorum* Porter in its much more black hairy calyx, much shorter and acuminate straight pod with simple deep dorsal sulcus.

5. **Hedysarum flavescens**, n. sp. — Erect, 3 to 4^{dm} high, minutely pubescent: stipules connate, opposite the petiole; leaflets five or six pairs, oblong-elliptical, 1.5 to 2^{cm} long, slightly pubescent beneath: racemes fifteen to thirty-flowered, short, rather dense, elongated in fruit: flowers bright yellow, 15^{mm} long, the wings exceeding the vexillum, but shorter than the keel: calyx-teeth triangular-subulate, shorter than the tube: pod two or three-jointed, smooth. — Near Helena, Montana, May, 1892, *F. D. Kelsey*. Nearest *H. borealis*

Nutt., but distinguished from it by its more erect habit, fewer and usually broader (prominently cuspidate) leaflets, much shorter and denser racemes of larger bright yellow flowers, and wings larger than the vexillum.

6. *RUBUS DELICIOSUS* James. — Mrs. S. B. Walker, of Castle Rock, Douglas County, Colorado, has sent a form of this species with glandular pubescence on branches, young leaves, and calyx, but not so prominent as in *R. Nutkanus* Moçino. It was collected June, 1889, at an elevation of 7,000^{ft}. Mature fruit was not seen.

7. *Aster MacDougali*, n. sp. — Glandular throughout, minutely so below, densely so in the inflorescence and on the involucre: stems erect, 5 to 9^{dm} high, flexuous and corymbosely branched above or simple, soon becoming naked below, from a slender creeping rootstock: leaves oblong-ovate, acuminate, strictly sessile by a round or cordate base, thin, prominently nerved, coarsely and sharply dentate, scabrous on the margins, 8 to 13^{cm} long, 3 to 6^{cm} broad: heads few on each branch (13^{mm} high, 15 to 20^{mm} broad), terminating the densely glandular peduncles (2.5 to 4^{cm} long): involucre rather loosely imbricated in three or four series, the bracts narrowly lanceolate from a broad base, acute or acuminate, light-green with a glandular-ciliate and narrow scarious margin: rays twenty-five to thirty, pale blue, linear, 2^{cm} long: style appendages flat and broad (linear in the ray-flowers): stamens very acute: achenes linear-oblong, 6 to 10 nerved, villous, with simple very coarse densely bearded pappus. — Near Lake Pend d'Oreille, Idaho, August, 1892, at an elevation of about 3,000^{ft}, *D. T. MacDougal*. A very handsome species, near *A. acuminatus* Michx. in general appearance, but differs in being glandular pubescent throughout, in its sessile leaves with rounded or subcordate base, larger heads, more foliaceous lanceolate involucre bracts not so loosely imbricated, longer pale blue rays, flat and broader style-appendages, and much longer and villous (not glandular) achenes.

8. *DODECATHEON CRENATUM* Greene. — We refer here a *Dodecatheon* collected at Granite, Montana, July, 1892, at an altitude of 8,500^{ft} by *F. D. Kelsey*. The specimens are without fruit, and differ from the description of *D. crenatum* only in the leaves being entire or nearly so, and in the umbel being fewer-flowered. Mr. Kelsey says that the "flowers

when fresh appear coarse, large and showy." Possibly mature fruit will indicate greater differences.

9. *MERTENSIA LANCEOLATA* DC.—A low white-flowered form, with narrow sharply acute leaves, and filaments broader and longer than usual (almost twice as long as the short greenish anthers) has been collected by *Mrs. S. B. Walker* near Castle Rock, Douglas county, Colorado, 1892. The form would seem to deserve varietal rank in a less polymorphous species.

10. *MIMULUS LEWISII* Pursh, var. *exsertus*, n. var.—A tall form, with broader leaves (6 to 9^{cm} long, 2.5 to 3.2^{cm} wide) which are acuminate and perfectly entire, corolla 4.5^{cm} long with the broad tube about half exserted (limb reddish-purple and tube lighter colored), and the whole plant more or less viscid pubescent.—High mountains of northern Colorado, *George E. Osterhout* of New Windsor, Colorado.

11. *Pentstemon linearifolius*, n. sp.—Near *P. Lyallii* Gray, but grayish throughout with soft white pubescence: stems erect, about 3^{dm} high, from a very long horizontal slender woody rootstock: leaves smaller, linear (sometimes narrowly lanceolate), entire (rarely a very few indistinct serrulations), 4 to 5^{cm} long: raceme six to twelve-flowered, more glandular: flowers much smaller (2.5 to 3^{cm} long), light purple: anthers less woolly: pod oblong-ovate, very acute, 15^{mm} long, longer than the narrowly lanceolate attenuate sepals.—Near Lake Pend d'Oreille, Idaho, 1892, at an elevation of 3,000^{ft}, *D. T. MacDougal*.

12. *PENSTEMON HUMILIS* Nutt.—A form with longer peduncles and pedicels than usual, making a longer and laxer inflorescence, was collected by *Mrs. S. B. Walker* in Douglas County, Colorado, May, 1892, at an elevation of 7,500^{ft}.

13. *PENTSTEMON CONFERTUS* Dougl., var. *CÆRULEO-PURPUREUS* Gray.—A form with long peduncles bearing fewer flowers and so forming a much looser raceme, and with leaves almost uniformly denticulate, was collected near Helena, Montana, June, 1891, by *F. D. Kelsey*.

14. *Pentstemon ellipticus*, n. sp.—Erect stems herbaceous, minutely puberulent, 7.5 to 12.5^{cm} high, arising as branches from a more or less horizontal (apparently subterranean) woody stem: leaves firm but hardly coriaceous, broadly elliptical to nearly rotund, obtuse, 2 to 3^{cm} long.

1.5 to 1.8^{cm} broad, sessile, those on the sterile branches short-petioled and longer, distantly serrulate or entire, densely and minutely black-punctate beneath: the slender pedicels, leaf-like bracts, and sepals of the three or four-flowered racemes densely viscid pubescent: corolla violet-purple, 3.5^{cm} long, strongly bilabiate and ventricose, with narrow throat and erose lobes: sepals lanceolate, more or less attenuate, 10 to 12^{mm} long: stamens somewhat exserted, deep purple, with white comose anthers, the sterile one shorter and densely pubescent above: pod oblong-ovate, acute.—Near Lake Pend d'Oreille, Idaho, August, 1892, at an elevation of 3,000^{ft}, *D. T. MacDougal*. A member of the puzzling *P. Menziesii* group, which has been variously modified by Dr. Gray and Professor Greene. Our plant seems to bear some relationship in habit and general structure to the dwarf alpine *P. Davidsonii* Greene, but, of course, is very much larger in every way, the erect herbaceous leafy flowering branches rising 7.5 to 12.5^{cm} above the ground from a more or less procumbent or horizontal woody subterranean stem.

15. *PLANTAGO PATAGONICA* Jacq., var. ***lanatifolia***, n. var. —Nearest to var. *gnaphalioides* Gray, but distinguished by its more spreading habit, floccose throughout with long silky white wool, more numerous (thirteen to twenty-one) oblanceolate broader (10 to 18^{mm}) usually five to seven-nerved somewhat minutely denticulate leaves, more numerous peduncles, thicker spikes (6 to 12^{mm} in diameter), and bracts but two-thirds the length of the sepals.—Texas, Hockley (*F. W. Thurnow* in 1890), Industry (*H. Wurzlow* in 1891). This description includes two forms, one of which is very densely white floccose, with narrower and more numerous spikes and very acute leaves; the other more robust and spreading, with broader and scarcely acute leaves.
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